COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF HENDRON WATER DISTRICT

FOR (1) A CERTIFICATE OF PUBLIC

CONVENIENCE AND NECESSITY AUTHORIZING

APPLICANT TO CONSTRUCT AN ELEVATED WATER

STORAGE TANK AND WATER LINES; (2) APPROVAL

OF FINANCING THE PROPOSED CONSTRUCTION

THROUGH THE KENTUCKY INFRASTRUCTURE

AUTHORITY AND AUTHORITY TO INCUR

INDEBTEDNESS; (3) APPROVAL OF THE PROPOSED

ADJUSTMENT OF RATES AND TARIFFS NECESSARY

TO PAY THE INDEBTEDNESS INCURRED; AND (4)

APPROVAL OF LOANS PREVIOUSLY INCURRED BY

THE APPLICANT

ORDER

shall file an original and 10 copies (two copies of engineering-related materials) of the following information with the Commission, with a copy to all parties of record by October 11, 1991. If the information cannot be provided by this date, Hendron Water should submit a motion for an extension of time stating the reason a delay is necessary and include a date by which it will be furnished. Such motion will be considered by the Commission. Hendron Water shall furnish with each response the name of the witness who will be available at the public hearing for responding to questions concerning each item of information requested.

1. Hendron Water filed a copy of the Natural Resources and Environmental Protection Cabinet ("Division of Water") approval of

the proposed tank construction with its application. However, the Division of Water's approval of the proposed water line construction was not filed. Provide this document.

2. KRS 322.340 states "Plans, specifications, plats and reports approved by a registrant shall be signed and dated by the registrant and stamped with the seal when filed with public authorities." The plans, specifications and engineering reports filed in this case do not comply with this statute, as the registered engineer's seal is not affixed.

Provide appropriate documents which comply with KRS 322.340 or, in the alternative, the documents currently on file in this case may be signed, sealed, and dated by the registered engineer.

- 3. The computer hydraulic analyses filed in this case for the proposed water distribution system depict existing Pump No. 1 "operating out of range." This would indicate that this pump is unable to satisfy the system's hydraulic conditions as input. State whether this type operation is expected to occur after construction and, if it is expected, state what preventive measures or additional construction Hendron Water intends to perform to protect against this type of occurrence. Also provide a copy of the pump manufacturer's characteristic (head/capacity) curve for Pump No. 1.
- 4. The computer hydraulic analyses filed in this case for the proposed water distribution system indicate that the potential exists for the system to experience low pressure (less than 30 psig) at Node 40 (suction side of Pump No. 2). Pressures at this level are in violation of PSC regulation 807 KAR 5:066, Section

- 6(1). Provide details on any preventive measures or additional construction Hendron Water intends to perform to protect against this type of occurrence. Details should be documented by hydraulic analyses and field measurements. State whether any customers will be affected by this potential low pressure and whether this potential low pressure will cause any operational problems for Pump No. 2.
- 5. The engineering information submitted with the application indicates that Hendron Water is proposing to install 17 fire hydrants as part of this project. KRS Chapter 227, the "Recommended Standards For Water Works" by the Great Lakes - Upper Mississippi River Board of State Sanitary Engineers ("Ten States Insurance Services Office ("ISO") have Standards") and the requirements for providing fire protection. All of these references require fire hydrant installation on a minimum of six-inch diameter water lines. For residential construction, the ISO requires the capability to deliver between 500 to 1500 gallons per minute of 2 hours from any fire hydrant. The Ten States Standards allow a fire hydrant on dead-end mains for flushing only if flow and pressure are sufficient. Otherwise an approved flushing hydrant or blow-off valve should be used. Based on the above, provide information as to the purpose of the proposed fire If the purpose of the proposed fire hydrants is to provide fire protection, provide hydraulic analyses demonstrating the capability of Hendron Water system to comply with the requirements of KRS Chapter 227, the ISO and the Ten States Standards. If the fire hydrants are proposed for reasons other than fire

protection, state why other equipment was not considered (e.g., blow-off valves, drain valves, etc.).

Done at Frankfort, Kentucky, this 24th day of September, 1991.

PUBLIC SERVICE COMMISSION

For the Commission

ATTEST:

Executive Director